

Response
Application No. 10/720,110
Attorney Docket No. 032135

REMARKS

Claims 1-4 are pending in this application. By this Amendment, claim 1 has been cancelled and claim 4 has been amended. It is respectfully submitted that this Amendment is fully responsive to the Office Action dated May 3, 2007.

As to the Merits:

As to the merits of this case, the Examiner sets forth the following rejections:

claim 1 is rejected under 35 U.S.C. §103(a) as unpatentable by Beaty et al. (U.S. Pat. 6,064,756) in view of official notice (MPEP 2144.03);

claims 2 and 4/1 are rejected under 35 U.S.C. §103(a) as unpatentable by Beaty ('756) in view of Watanabe (U.S. Pat. 7,027,963) and official notice (MPEP 2144.03); and

claims 3 and 4/3 are rejected under 35 U.S.C. §103(a) as unpatentable by Beaty ('756) in view of Watanabe ('963) as applied to claim 2 further in view of Michael (U.S. Pat. 6,173,070).

Each of those rejections is respectfully traversed.

Independent Claim 2:

With regard to claim, 2, the Examiner acknowledges that, "Beaty does not disclose cameras positioned at a three-dimensional location, wherein each camera are positioned on each axis parallel to each axis, horizontal, vertical and depth axis."

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In order to compensate for the above-noted drawbacks and deficiencies of Beaty, the Examiner relies on the secondary reference of Watanabe. More specifically, the Examiner asserts that:

Watanabe discloses retrieving two-dimensional shape images representing shape data of object from the top and the two side perpendicular to each other (see figure 8A – in screen 21, shows three views of a workpiece taken from the three perpendicular axes, horizontal, vertical and depth, column 6 lines 40 – 50) and using the retrieved CAD images to generate a three-dimensional image of the workpiece from the two-dimensional images (see figure 8C – shows three-dimensional shape of the workpiece, also see column 6 lines 63 – 67). One skilled in the art would capture images parallel to coordinate axes because the imaging lines parallel to the cameras are use as origin for all respectively axes, which decrease the complexity of determining the position of the object.

However, it is respectfully submitted that the Examiner's reliance on Watanabe and the Examiner's comments regarding capturing images parallel to coordinate axes completely lack merit, since Watanabe fails to even disclose using a camera to capture image data.

Instead, in Watanabe, two-dimensional drawing data imported from a CAD system 2 are added with position information in a virtual three-dimensional space displayed on the screen 13 to create a three-dimensional model consisting of lines and planes to be laid out on the screen 13. See, column 6, lines 32-37.

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More specifically, according to column 6, lines 51-59 of Watanabe:

Two-dimensional geometry information created by a CAD system, for example, the CAD system 2 independent of the simulation system 1, are imported into the simulation system 1 through an electric communication line 4 or an electronic medium. In this case, the contour data of the two-dimensional drawing 21 (a top view, a front view, and a right side view) of the workpiece as shown in FIG. 8A are outputted in a file format.

As such, it is respectfully submitted that neither of the applied references of Beaty and Watanabe disclose or suggest the features of claim 2 concerning *said first imaging means is configured so that said two imaging sections are arranged along said second axis or a third axis which is perpendicular to said first and second axes, and said imaging sections image said structural member in a direction of said first axis,*

said second imaging means is configured so that said two imaging sections are arranged along said first axis or said third axis, and said imaging sections image said structural member in a direction of said second axis, and

said third imaging means is configured so that said two imaging sections are arranged along said first axis or said second axis, and said imaging sections image said structural member in a direction of said third axis.

In addition, the Examiner also acknowledges that, “Beaty also does not disclose having a pair of cameras from each location shown in figure 14.” The Examiner attempts to compensate for the above-noted deficiencies of Beaty by asserting that:

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However, it is well known in the stereoscopic art to use at least two cameras, separated by a predetermined distance, to obtain stereoscopic images to generate three-dimensional images. One skilled in the art would include a pair of camera to capture stereoscopic images because to prevent the cameras to have to move to capture second stereoscopic image to increase speed of inspection.

However, it is respectfully submitted that the Examiner has failed to appreciate that in claim 2 each of the two imaging sections of each of the first, second, and third imaging means generate two-dimensional image data **and not stereoscopic images.**

Accordingly, it is respectfully submitted that neither of the applied references of Beaty and Watanabe disclose or suggest the features of claim 2 concerning *first, second, and third imaging means, each of said imaging means comprising two imaging sections which are spaced apart from each other by a predetermined distance, said structural member being imaged by said imaging sections to generate two-dimensional image data; and model data generating means for generating three-dimensional model data including at least shape data which define a three-dimensional shape of said structural member, on the basis of sets of two two-dimensional image data which are generated respectively by said first, second, and third imaging means.*

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

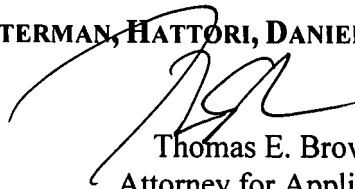
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If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP



Thomas E. Brown
Attorney for Applicants
Registration No. 44,450
Telephone: (202) 822-1100
Facsimile: (202) 822-1111

TEB/nrp